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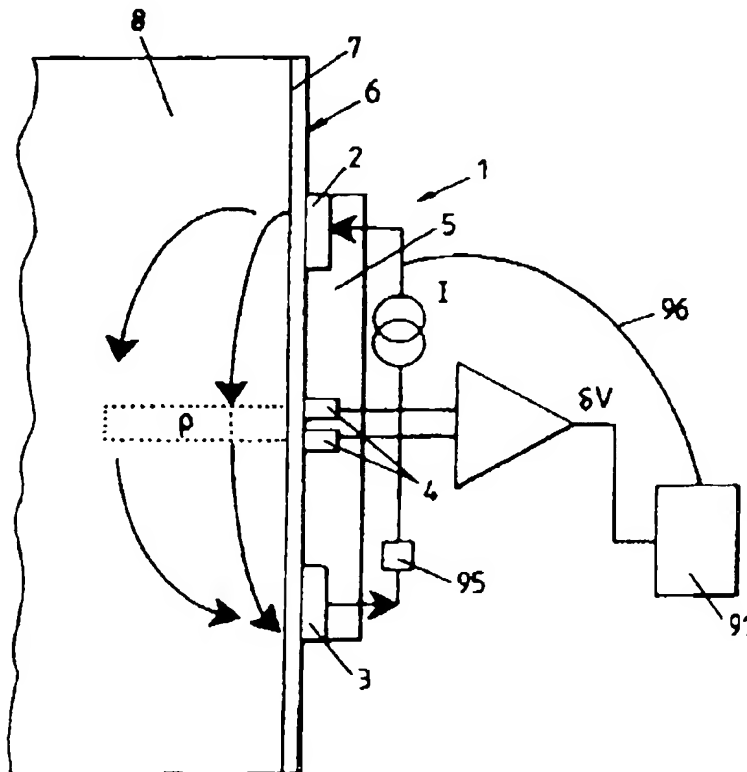
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[Continued on next page]

(54) Title: PHASE DISCRIMINATION FOR MICRO ELECTRICAL MEASUREMENT IN NON-CONDUCTIVE FLUID



(57) Abstract: A method for electrically investigating a wall of a borehole in a geologic formation including injecting a current into the formation at a first position along the wall and returning the current at a second position along the wall, the formation current having a frequency below about 100 kHz, measuring a voltage in the formation between a third position and a fourth position along the wall, the third and fourth positions being located between the first and second positions, and determining an amplitude of a component of the voltage in phase with the current.

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